

the coupling imparts benefits over a rigid pivot, namely that the shafts can move to a restricted extent in any way with respect to each other.

Grasping devices with similar configurations of their parts to those of this invention have been used widely for a very long time. However, the present invention is distinguished from them in important ways. Configuration 1 is similar in action to tweezers or tongs that are made by connecting two elements at one end so that their other ends, the grasping ends, are separated by spring action. They are operated by forcing the grasping ends together to pick up objects. Unlike the present invention, they are not separable and the connection between the two grasping elements is not flexible or adjustable. Configuration 2 is similar in action to scissor type tongs, where two elements are joined near the grasping end with a mechanical hinge and the handles are drawn apart to open them and drawn together to close them together on an object. Pliers and scissors have two grasping or cutting elements configured in this manner. Some of these devices can be taken apart for cleaning. Unlike the present invention, these other known devices have fixed couplings that cannot be moved along the handles, and if they can be disconnected, the two separate elements are generally not useful when separated. The present invention advances the art by combining two similar elements that are individually useful in such a way that they are more useful combined than when used individually and permitting the user to adapt their configuration as desired.

Claims

What is claimed is:

1. An apparatus for gathering, picking up and carrying materials comprising
 - a) two grasping elements which each have shafts with grasping means at one end, and
 - b) a flexible coupling means which can be moved along the shafts of the grasping elements to connect them together while permitting each of them to

rotate along the axes of their shafts and to pivot with respect to each other so that the grasping heads can be brought together or moved apart from each other.

2. An apparatus as in claim 1, wherein the grasping elements have shafts with diameters of 0.5 to 3 inches.
3. An apparatus as in claim 1, wherein the grasping elements have shafts with lengths of two to six feet.
4. An apparatus as in claim 1, wherein each grasping element has a grasping head that consists of tines arrayed to form a rake.
5. An apparatus as in claim 4, wherein the grasping elements are commercially available garden rakes for raking leaves , dirt or other materials.
6. An apparatus as in claim 1, wherein each grasping element has a grasping head fabricated as the head of a shovel from sheets of metal, wood or plastic that extend along the axes of the shafts for three to eighteen inches and extend sidewise equally on both sides of the shaft for a total width of three to twenty four inches.
7. An apparatus as in claim 6, wherein the grasping elements are commercially available shovels for shovelling dirt, snow or other materials.
8. An apparatus as in claim 1, wherein the coupling means consists of two loops that have diameters slightly larger than the diameters of the shafts to be connected and said loops are connected by a flexible linkage means having a length of one fourth to 4 inches.

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~~An apparatus as in claim 8, wherein the entire coupling means is molded of, or cut from sheets of, an inherently flexible polymeric material such as elastomeric plastic or rubber.~~

10. ~~An apparatus as in claim 8, wherein the flexible linkage of the coupling means is made of rigid material fabricated to impart flexibility, such as in the form of a chain.~~

11. An apparatus as in claim 8, wherein the coupling means comprises loops of material that are connected by flexible material in the form of a band or rope.

12. An apparatus as in claim 8, wherein the loops of the coupling means contain clamping devices that permit them to be moved along the shafts to a desired position and then clamped there to prevent further unwanted movement.

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